

REMARKS

Claims 1-33 are pending in this application. Claims 1, 7, 13, 14, 21, and 28-32 have been amended to define still more clearly what Applicant regards as his invention. Claims 1, 7, 14, and 21 are independent.

In the final Office Action mailed on August 18, 2004, Claims 7-10, 12, 21-24, 26, and 27 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,535,644 to Kurapati. Claims 1-6, 11, 13-20, 25, and 28-33 were rejected under 35 U.S.C. § 103(a) as being obvious from Kurapati in view of U.S. Patent 6,711,299 to Chao et al.

Claim 1 is directed to a method of dividing a digital signal representing physical quantities. The method includes the steps of determining an initial partitioning of the signal, and displaying a representation of the signal and a representation of the previously determined signal partitioning superimposed onto the representation of the signal. The method further includes the steps of acquiring at least one partitioning modification parameter through an intervention by a user, modifying the partitioning of the signal in accordance with the at least one partitioning modification parameter, and displaying a representation of the modified partitioning.

One notable feature of Claim 1 is the superimposing of a representation of the partitioning of an image and the modifying of this partitioning through user input. To this end, Claim 1 has been amended to clarify that what is displayed is a *representation* of the partitioning and that this representation is superimposed onto the image. This feature is

supported by the application as originally filed, at least from page 12, line 24, to page 13, line 19, and Figs. 4 and 5.^{1/}

Also important are that the modification of the partitioning is performed “in accordance with the at least one partitioning modification parameter” previously acquired through an intervention by the user, and the recitation of “displaying a representation of the modified partitioning.” This latter feature is supported by the application as originally filed, at least at page 13, lines 11-19, and Fig. 3 (step E7 to step E4).

Kurapati, as understood by Applicant, relates to the communication and presentation of wavelet encoded images. Different images, or sub-images, are rendered at different wavelet decoding rates, the more rapidly decoded wavelets forming a focal region about which less detailed images, or sub-images, are formed. The Office Action asserts that Kurapati discloses the step of “displaying a representation of signal and the previously determined signal partitioning at the same time.” The Office Action cites Figs. 3B-3F and Figs. 8A-8D of that patent.

It should first be pointed out that Figs. 8A-8D of Kurapati do not relate to the partitioning (i.e., the division) of a digital image but rather to the display of a plurality of images (see, e.g., column 8, lines 1-2 of that patent) and therefore would not teach or suggest a method dividing a digital signal as recited in Claim 1.

Turning now to Figs. 3A-3F of Kurapati, it should be understood that the cells drawn in each figure represent the resolution of the rendering in each region, as explicitly stated in Kurapati at column 4, lines 14-16. Hence, in Kurapati, the cells of Figs.

^{1/}It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

3B-3F are lines representing theoretical characteristics of regions of the image and are indicative of the amount of data downloaded in each region, but are not actually displayed superimposed onto the image. Applicant submits that such superimposition would be totally inadequate in Kurapati where the aim is to display a downloaded image in a presentable fashion (see, e.g., column 1, lines 8-10, column 2, lines 42-45, and column 5, lines 10-23, of that patent), which excludes the display of theoretical characteristics of the image.

Therefore, it is submitted that Kurapati fails to teach or suggest displaying a representation of the partitioning superimposed onto the representation of the signal itself (image), as recited in Claim 1.

Furthermore, although the Office Action cites column 4, line 12, to column 5, line 25, of Kurapati, as disclosing “controlling at least one partitioning modification through an intervention by a user,” Applicant has found, after a thorough review of that cited portion of Kurapati, nothing that would teach or suggest that the user would be able to control a partitioning modification in Kurapati. As already pointed out, Kurapati discusses a system for displaying an image to an end user with the best rendering possible but gives no possibility for the user to modify the presentation. For this reason, Applicant submits that the partitioning used in Kurapati is completely predetermined (in a hierarchical manner) so that the only “action” performed by the user according to Kurapati is watching the image downloading (as discussed in Kurapati at, e.g., column 5, lines 6-25).

Therefore, Applicant submits that nothing in Kurapati would teach or suggest control of the partitioning by the user. Chao et al. is understood to relate to

wavelet-based image compression, but nothing has been found in that patent that would remedy the deficiencies of Kurapati discussed above as a reference against Claim 1.

Accordingly, Claim 1 is seen to be clearly allowable over Kurapati and Chao et al., either separately or in any permissible combination (if any).

Independent Claim 14 is a device claim corresponding to the method of Claim 1, and is believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.

Claim 7 is directed to a method of dividing a digital signal representing physical quantities. The method includes the steps of determining at least one area of interest in the signal through an intervention by a user, determining an initial partitioning of the signal, including partitioning areas, and modifying the partitioning of the signal according to the at least one area of interest and a predetermined criterion.

One notable feature of Claim 7 is determining an area of interest through an intervention by a user. This feature is supported by the application as originally filed, at least at page 16, lines 7-14.

The Examiner apparently considers the focal region 310 of Fig. 3A of Kurapati to be an area of interest for the image. However, Applicant submits that since the purpose of this region is to take advantage of foveation, this region of the image is totally predetermined (no other region could provide the same foveation effect) and cannot therefore be determined through an intervention by a user.

Nothing in Kurapati would teach or suggest determining an area of interest through an intervention by a user, as recited in Claim 7.

Accordingly, Claim 7 is seen to be clearly allowable over Kurapati.

Independent Claim 21 is a device claim corresponding to method Claim 7, and is believed to be patentable for at least the same reasons as discussed above in connection with Claim 7.

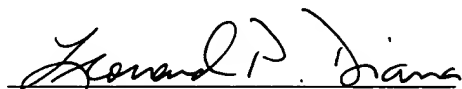
A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


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